

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/197,643	KUWATA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nhan T. Tran	2615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/04/2004 and 6/23/2004.
2. ☒ The allowed claim(s) is/are 1 and 3-20.
3. ☒ The drawings filed on 11 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 11/04/2004 has been entered.

### ***Response to Arguments***

2. Applicant's arguments, see amendment, filed 11/04/2004 and 6/23/2004, with respect to claims 1, 3-20 have been fully considered and are persuasive. The reasons for allowance mailed 8/13/2004 are maintained.

### ***Allowable Subject Matter***

3. Claims 1, 3-20 are allowed.

The following is an examiner's statement of reasons for allowance:

Art Unit: 2615

Regarding independent claims 1, 12-14, the prior art of record fails to teach or fairly suggest the combination of all limitations required in each of the above independent claims, including the limitation “...*said color-blur pixel detection unit detects said color blur pixel based on change rate of element color intensity for a low-density color filter, between closely adjacent pixels.*” as required in claims 1 & 12, and a similar limitation “...*said detection of said color blur pixel is based on change rate of element color intensity for a low-density color filter, between closely adjacent pixels.*” as required in claims 13 & 14.

Regarding claims 3-8, the claims are allowed as being dependent of claim 1.

Regarding independent claims 9-11 & 15, the prior art of record also fails to teach or fairly suggest the combination of all limitations required in the claims 9-11 & 15, including the limitations “...*said image processing unit performs smoothing processing on color difference components, obtained by subtracting luminance components from element color components of the pixels within the predetermined range having said color blur pixel as the reference pixel, and returns the smoothing processed components to initial element color components*” as required in claims 9 & 15, and similar limitations “...*said image processing unit replaces a color difference component having a central value of color difference components, obtained by subtracting luminance components from element color components of the pixels within the predetermined range having said color blur pixel as the reference pixel, with a color difference component of said color blur pixel, and returns the color difference components to initial element color components.*” as required in claims 10 & 11.

Regarding claims 16 & 17, the claims are allowed as being dependent of claim 15.

Art Unit: 2615

Regarding independent claims 18 - 20, the prior art of record also fails to teach or fairly suggest the combination of all limitations required in each of the claims 18-20, including the limitations “...*a color blur pixel detection unit detecting a pixel having a high  $\Delta RB$  change rate between adjacent pixels, wherein the pixel having the high  $\Delta RB$  change rate is regarded as a color blur pixel in the image data.*”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

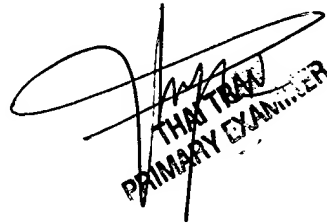
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Thai Tran can be reached on (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.



THAM TRAU  
PRIMARY EXAMINER